
ORAL HYGIENE
SEPTEMBER
1925
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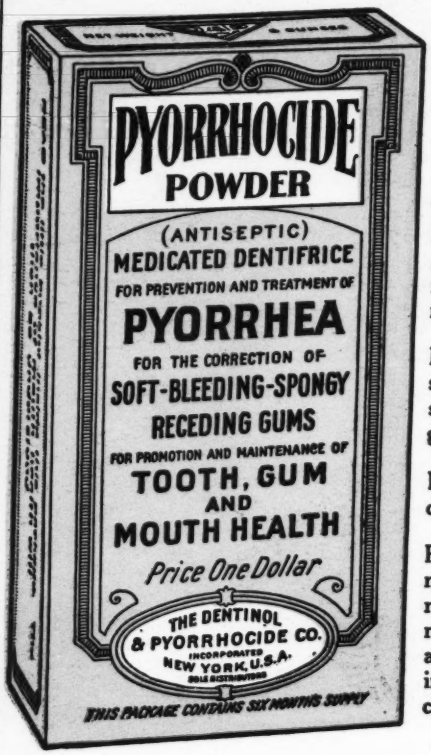

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ORAL HYGIENE *for* September 1925

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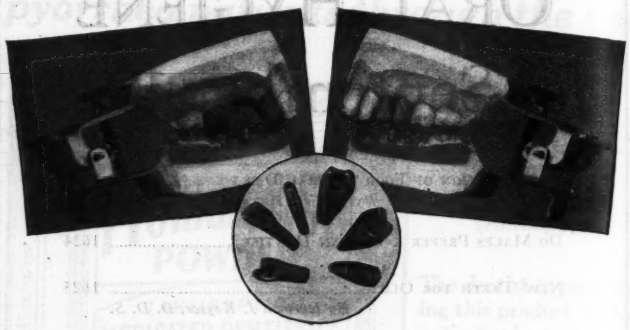
ADDRESS CHANGES—Since we must start addressing wrappers early in the month preceding the month of issue, it is necessary that address changes reach the district publisher by the first day of the month preceding the issue to be affected. Changes received on September first, for instance, will first affect the October issue. Changes received later in September will first affect the November issue. Both the old and the new address should in all cases be furnished.



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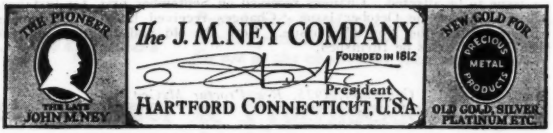

ORAL HYGIENE

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International photo.

Miss Bultea Rawlings, chosen as the possessor of the most beautiful teeth, after a test made in eastern states.

The Relation of Food

By WILLIAM HOWARD HAY,

THE present is the age of prophylaxis, just beginning, but due to assume concrete form and large proportion in the next few years.

This is directly due to the persistent failures of corrective treatment of established disease, failures compounded of almost total ignorance of the predisposing causes of disease of all kinds, and a desire to do something of concrete benefit for the finished disease without removal of the cause.

Dentistry does much to prolong the life and usefulness as well as the beauty of the teeth, to prolong the period of the particular degeneration that we call pyorrhea, or Riggs disease, to repair the damage done by lack of care, to replace with artificial structures those teeth that have been lost, and all made necessary by a complete misunderstanding of the basic causes that have made these degenerations possible.

Even so in medicine, we are still fussing with end results, still seeking to repair damage already done, still locking the stable door after the horse has been stolen, still insuring the building against fire after the flames have all but consumed it.

It is nearly fair to say that the last five years comprise almost all of the newer knowledge of predisposing disease causes that has come to us from the beginning of medical time, as previous to this the knowledge of these was in the possession of so few men that little or no attention was ever paid to it by the profession at large.

But, thanks to the persistence of these few, attention is very gradually being called to the fact that real economy consists in locking the stable door before the horse has been stolen.

It is not among the impossibilities that in the very near future both the physician and the dentist will be paid to keep patients well, rather than to help them escape the penalties of error after these become evident.

It is a humanitarian, an altruistic thing to do to pull one's neighbor from the pit into which he has fallen, but is it less so to show him the way that will miss this same pit?

It is entirely possible to live in such a way as to side-step all of the long line of toxic and degenerative conditions that have cut down the span of life to the present average of 43 years, and without giving up one of the real pleasures of life, if one cares sufficiently for this very desirable condition to be willing to make a business of nutritional study, and at the same time be willing to persist in a course that may mean violent rupture of present absurdly wrong habits of life.

to Oral Disease

D. D. S., Buffalo, N. Y.

It is not among the impossibilities that in the very near future both the physician and the dentist will be paid to keep patients well, rather than to help them escape the penalties of error after these become evident.

Not long ago Dr. Charles Mayo said that medicine had gone about as far as it would ever go in modifying disease, and by medicine he meant the whole treatment of disease as now practiced, including his own field of surgery, and he further said that future advances were up to the dentist, and, would he accept the situation?

The delicate structures of the mouth, the gums, mucous membrane, tongue, even the teeth, are perhaps earliest of all the visible parts of the body to show failing nutrition, nutritional change that is below the normal, and for this reason there is logic in the challenge of Dr. Mayo.

If these changes occur earliest and plainest in the mouth, then the dentist, rather than the physician, is the man who first should recognize the red light of warning that danger impends, and he is the one to break this news to the patient.

The physician is not called in or upon till something far more grave or annoying than dental caries or gingivitis or coated tongue or tooth abscess occurs, and even Riggs disease is looked on as a local condition, within the field of the dentist wholly, yet every one of these conditions is lurid evidence of nutritional deficiency that has gone far, and should be so regarded.

No doubt most of you are familiar with the work of Dr. Howe on monkeys, and of Dr. McCollum on the smaller animals, both of whom are able to produce any of the markedly deficient conditions by withholding some one or more of the necessary elements from the food. In this way dental caries, tooth abscess, gingivitis, pyorrhea, all appear after the deficiency is created and disappear after this is corrected; sterility can be guaranteed by deficiencies and fecundity restored by addition of the missing elements.

Development can be arrested, bone formation wholly inhibited, by a simple withholding of one or two of these elements, or by giving these in ratio below the body needs. These results are not the exception, interesting

as a phenomenon, but are to be expected as an invariable rule, showing the intimate connection between deficiency in feeding and the diseases that are today the chief cause of the shamefully low life rate, and the equally shamefully high disease rate in this most enlightened of races in this most enlightened age.

If we analyze the deficiencies that are most destructive we will find that in every case these are alkalies that are predominant in the body, and we should never lose sight of the fact that the body is 80 per cent alkalin and 20 per cent acid, and if we are to preserve this ratio how can it be done in any other way than by making the food intake of each day correspond to this ratio?

We are a total and exact composite of what every day enters the body in the form of nourishment, and we can never get away from this fact by any sophistry or by any desire to dodge the fact, for we are what we eat, nothing else.

The human body is composed of the same 16 elements as form all life.

If you will set down these 16 elements in their volumetric ratio as they occur in the body, you will find that while ten of these are acid or acid-forming, and six are alkalin or base-forming, addition of the volumes of these brings us the total of 80 per cent alkalin and 20 per cent acid.

This seems to be Nature's ratio, for it obtains in all organized life, in the mammals, the fishes and everything that possesses conscious life.

Nature is intolerant of acid in the exercise of its functions, and when we have finally reached the end of our investigations, if there ever will be such an eventuality, we will no doubt be forced to realize that function is well proportioned to alkalinity.

In the face of this consideration we do not do well to speak of acidosis, as an acid condition is so completely incompatible with life that this will terminate all function promptly in the face of even a very mild acidity, so the term deficient alkalinity is much more exactly expressive of the condition that we are continually referring to as acidosis.

As we depart from the normal 80-20 ratio we depart almost evenly from a normal function, and as we approach this ratio again function is restored quite uniformly.

This can be demonstrated clinically just as it is continually demonstrated in the animal subjects of the laboratory.

In view of this fact what more important study can there be than that of how best to conserve this normal ratio?

The acids that lower the alkalin reserve, that break down the normal ratio, are of well-defined origin, there being but four recognizable sources of these, all sources completely within the control of the individual, when properly appreciated.

These are: a ten times too high ratio of proteins in the usual daily intake of food; the too free use of de-alkalinized

foods, the processed starches and sugars chiefly; the use of incompatible foods, any of which in proper relation with other foods may be good, but whose concurrent digestion is impossible; and finally, the retention of the colon contents beyond the 24-hour limit which marks the end of safety.

It will be seen at a glance that all four of these recognized sources of acid-formation are easily within control, and this without serious deprivation of enjoyment in the use of foods.

In these four sources of acidosis, so-called, are kept constantly in mind this will lead to a gradual cessation of acid-formation in the body, with an increasing alkalin reserve, rising function, and gradual disappearance of all those outgrowths of acid conditions that are coming generally to be recognized as deficiency diseases.

They are in very truth deficiency diseases, in the sense that absence of the normal alkalin reserve is a deficiency, and whether we call this avitaminosis, deficient alkalinity or what, matters little, as the condition responds to a reinforced alkalin reserve.

We have yet to learn just what a vitamin really is, no one so far having succeeded in isolating a recognizable substance or entity that can be identified, and whether the vitamin is really an entity or a certain definite expressed relation among the various native tissue salts matters little, so that we do but recognize the fact of vital deficiency.

Dr. Howe is able to cause with the monkeys all of the usual deficiency diseases by withholding one or more of these ubiquitous 16 elements, and able to restore such deficiency within very short periods by restoring the missing elements. This is significant, and whether or not we admit our near relationship to the monkey we have, at least so far, not been able to establish that we are not subject to the recognized laws of all flesh, and can scarcely escape the inference that we are equally susceptible to deficiency in replenishment.

Dental caries is never looked on as a primary deficiency, and yet Dr. Howe is able to produce this at will in monkeys and rodents by withholding certain elements, and can promptly arrest the decay by restoring the full quota.

Gingivitis is an early evidence of deficiency in all underfed, or vitamin-starved, animals, and is promptly cleared up by making good the deficiencies.

A later development of this same deficiency is apical infection, also promptly arrested by restoring the deficiencies, and it is reasonable to suppose that if the nutrition of the dentine has not been cut off even this will regenerate even to the very apex, but too often the dentine is completely denuded of its periosteal sources of supply, and must be in the nature of a foreign body to that extent.

That pyorrhea is primarily a local expression of a general sys-

The evidence of deficiency, which we may safely call acidosis or deficient alkalinity, are easily recognized, and it is true that the mouth gives these earliest and plainest, making of the profession of dentistry the first line of defense.

temic acidosis is only lately coming to be believed, and yet this is one of the most easily demonstrated truths of the whole category.

It was my privilege a few months ago to hear Dr. Elmer V. McCollum in one of his intensely interesting summations of his laboratory experience with small animals, and the discussion following his talk gradually turned to pyorrhea.

I asked him whether or not it would be fair to state that every case of pyorrhea is nothing but this same local expression of a general systemic acidosis, and he replied that this was exactly his idea.

My personal experience has been wholly clinical, and this always incidental to general systemic disease, usually diabetes mellitus.

Dr. McCollum says that every case of pyorrhea is a potential diabetic, and this is a fair statement, in view of the fact that of all the line of deficiency and degenerative diseases this one shows the highest acidity; rather it shows the lowest alkalin reserve, so of all diseases is most apt to be associated with a pyorrhea.

If diabetes has gone far it is but natural to expect among other evidences of acidosis this same pyorrhea, and I have come to always expect it. But the interesting thing, to me, is that no matter how bad the condition, with starchy tolerance gone, all hope of regeneration past, yet the detoxication and alkalin diet used in this disease has shown almost uniformly a gradual decline and final disappearance of the pyorrhea, even in the face of surely fatal termination of the diabetes, and this wholly without any local treatment whatever.

If this result can be expected in a hopeless diabetic, it is but fair to suppose that the same result can be achieved with greater certainty and facility in the organically sound patient, though the proof of this has not yet fallen to my lot, such cases still considering their pyorrhea a condition, wholly within the realm of dentistry.

Loose teeth will grow solid, the discharge about the roots will cease, and the receded gums will actually approach or finally reach the original gum line, when the formation of acid daily is interdicted by the cor-

rect selection and combination of foods.

This is not fancy theory, but oft-demonstrated fact, and surely furnishes proof aplenty, even if inverted, that pyorrhea is basically and wholly an outgrowth of acid conditions, and is certain to disappear when acid formation is arrested.

Recently in argument with a nose and throat specialist I succeeded in getting from him the admission that when we remove tonsils and curette adenoid accumulations we are not doing anything of constructive usefulness to the patient, and that nothing less than removal of the predisposing cause is really constructive treatment, and that if this acidosis, which he admitted was the cause, were removed it would obviate wholly all need for surgery, and yet after making the admission he came back with this statement: "All this is true, but I am a surgeon, and it is my business to curette adenoids and excise tonsils, and why should I argue with the patient as to his causes?"

This surgeon is willing to continue to fuss with end results, to continue to profit at the expense of the patient, and surely takes his Hippocratic oath lightly, yet his is almost the usual attitude.

I repeat that the thing is not impossible that in the very near future each physician and dentist will be paid to keep his patients well, using frequent examinations to forestall the advent of disease, rather than as a tinker who seeks all too unsuccessfully to repair damage done without removing the cause of this.

The public has come to expect that a visit to a physician means a hasty examination, a few poorly-related questions to partially cover a very meager history, a hastily-written prescription, with orders to call again in a week, perhaps with assurance of improvement, the whole a most perfunctory and superficial procedure that forces the patient to think that either his physician is little short of God Himself in omniscience or else that he does not know very much of the real condition for which he is consulted.

It is such consultations that have caused the terrible loss of confidence in medicine so noticeable today, and has more to do with the rapid growth of non-medical cults than any other one factor.

Any examination of a patient, whether medical or dental, that does not aim to discover and correct the metabolic shortcomings that have made disease possible has failed of its purpose, the mere naming of the condition being of secondary interest to the patient.

The evidence of deficiency, which we may safely call acidosis or deficient alkalinity, are easily recognized, and it is true that the mouth gives these earliest and plainest, making of the profession of dentistry the first line of defense.

An eminent tooth surgeon told me recently that he is not satisfied to extract objectionable teeth

successfully and painlessly, but the question continually obsesses him: "Why did this patient have this condition, and what are the causes that have led up to this, and were they preventable?"

This man is himself intensely interested in the whole subject of acidalkali balance, and he is not going to be happy till he has gone to the bottom of it, and will not then consider that extraction of offending teeth completes his obligation to the patient, but this is to be accompanied by a warning that continuation of the present dietary habits will result in the loss of more and more teeth from an increasing acidosis.

It is a strange freak of human nature, but it is noticeable generally that the dentist or the cosmetic physician or surgeon can give advice on diet that is eagerly followed by the average patient, while strictly medical instruction of exactly the same character is taken very lightly, or wholly unheeded.

This being so, it is easier for the dentist to make a deep impression on the habits of his patients than for the physician, whatever the cause for this, and it is not unlikely that the real cause is the usual custom of the physician to pass over the subject of food intake as of very minor importance, and concentrate the attention of the patient on the particular medicine given, or the particular operation advised, as being the means that will improve the state of the health, yet neither of these bears any relation whatever to health, but rather to disease, for neither removes or even contemplates the cause.

It has been extremely difficult to get the subject of nutrition from the standpoint of acidalkali balance before the classical circles of medicine, their frantic search for extraneous causes seeming to comprehend their entire effort in the search for predisposing factors, yet if you will allow me to control this one factor of food intake I care nothing for the other recognized causes of diseases, as is the case with every man who has given this matter even a small part of the attention it deserves.

A so-called defensive diet is in no sense a diet, but merely a scientific selection and combination of the usual foods, and to safeguard the system against all forms of extraneous sources of disease is to eat as man was intended to eat, of those foods ready prepared by Nature for foods, unspoiled by the ingenuity or the cupidity of the very resourceful manufacturer, preserver or purveyor of foods, and this cannot by any possible stretch of the imagination be considered a diet.

To follow a rule of natural selection and combination of foods is to make disease less and less liable, or even possible, and without depriving the individual of initiative in selection, or of variety, and leads infallibly to more enjoyment in the table than ever before experienced since early childhood, before the sense of taste has been vitiated

by highly seasoned foods, and the experiencing of natural hunger become a lost art.

Lest confusion arise in considering foods as a primary cause of oral diseases of all kinds, it becomes necessary to accentuate the fact that these causes bear no relation to the local effect of foods on the oral mucosa or the teeth, local irritant effects of foods, or accumulation of residual food particles, being negligible from the standpoint of cause, the connection being rather the presence or absence of a normal potential in replenishment, plus a combination of foods that will preclude the possibility of fermentation in the digestive tract, with consequent acid production.

Please fix indelibly the four sources of acid formation in the body, as a thorough comprehension of these will make an arrangement of foods and general regime to insure a normal alkalin reserve an almost automatic affair.

To repeat these: first, the use of ten times too much protein in some form in the daily ingesta; second, the too free use of dealkalinized foods, such as white breads, white flour preparations of all kinds, white sugar and all its generation; the use of incompatibles, as carbo-hydrate with either an acid or a protein; and, finally, the retention of the colon contents beyond the limit of safety, 24 hours.

If there are other causes of acidosis, so-called, or deficient alkalinity, they are of very minor importance, and surely if these four are controlled there will be no opportunity for degeneration of any kind whatever, and, whether or not you are willing to go so far, by the very same token there will be no susceptibility to external infections; in other words, there will be health.

Laboratory Men to Meet

DURING the first two days of the American Dental Association convention in Louisville this month, the American Dental Laboratories Association members will foregather at the Elks' Club to discuss problems pertinent to their work.

At the Dallas meeting last year, the American Dental Association gave favorable consideration to the matter of accepting the laboratory body as an associate of the A. D. A. itself, and decision as to this will likely be reached by the A. D. A. during this year's meeting. Meanwhile, members of the laboratory association are given admission to clinics, etc.

A comprehensive program has been planned for the meetings on September 21st and 22nd. President E. L. Mueller, of Omaha, will address the meeting when it opens on Monday morning. President Mueller will be followed by Samuel G. Supplee, New York, with a paper entitled "Operating Economically," the other papers scheduled for Monday being "Meeting Competition," by I. F. Miller, Pittsburgh; "Anatomical Articulation of Full Dentures," I. J. Dresch, Toledo; "Buying," Dr. T. M. Crutcher, Louisville; "Recreation," F. C. Miller, Detroit. At 4:30 p. m., Dr. K. W. Knapp, Minneapolis, will present an illustrated lecture entitled "The Practical Application of Casting Problems to the Commercial Laboratory."

The Tuesday session will be opened by J. C. Schwartz, St. Louis, with "Backing Up Your Advertising and Building Good Will." Mr. Schwartz will be followed by President Mueller, who will present a paper dealing with "Educating the Laboratory Employees and Selling the Dentist," the balance of the day being given over to the following speakers: W. H. Schroll, Chicago, on "Collections"; Henry P. Boos, Minneapolis, on "Equipment"; H. Fairbanks, Boston, on "Satisfying Employees"; C. E. Davis, Dayton, on "Business Building." Beginning at 4:30 p. m. Tuesday the meeting will be turned over to the entire membership for general discussion as "everybody's hour."

A business meeting and the election of officers will follow. Present officers are as follows: E. L. Mueller, president; W. H. Schroll, vice-president; H. G. Rockey, secretary; I. J. Dresch, treasurer. Members of the council are Henry P. Boos, Samuel G. Supplee, F. C. Miller, Charles Summersby, E. L. Mueller and J. C. Schwartz.

New Teeth for Old

By HERMAN J. KEYSER, D.D.S., Philadelphia, Pa.

Scientific men today are no longer skeptical about this new knowledge of and about the atom. Future discussion will determine whether the dental profession is skeptical about the implantation of the tooth germ to replace lost teeth.

THE other day, having completed a reading of the latest book by Sir Oliver Lodge, entitled "Atoms and Rays," wherein the mystery of the constitution of the atom and the possibility of use industrially of this new knowledge is unfolded, the thought came to me: "What about the tooth germ?"

Scientific men today are no longer skeptical about this new knowledge of and about the atom. Future discussion will determine whether the dental profession is skeptical about the implantation of the tooth germ to replace lost teeth.

We are acquainted with the full development of the tooth germ. This knowledge should be an aid in the researches of dental histologists and others interested in this subject. But where to get that germ or bud, and how to inject it, with the further control to produce the exact type of tooth, is research worthy of our greatest dental minds.

The very best dental substitute for extracted teeth is far from being like Nature's product. It is true that we have advanced much and have given mankind wonderful aid with our replacements. But we should not stop there. Why cannot our admirable American Dental Association appropriate a sum for this research? Science in every other field is advancing by leaps and bounds. The realm of electricity, with its many ramifications, is progressing at a rate that is staggering. Physicists have produced results that are also stupendous.

Just to illustrate, here are some of the latest results of research that are not theoretical, but definite: that in some sort matter and energy are interchangeable; that in quantams the radiated form of light go about in packets or indivisible units,

like cartridges, any one of which represents a store of energy, and which energy may be liberated for use; the nucleus of the atom has been measured; that every nucleus of an atom contains hydrogen; that atomic nucleii have been separated by means of radium (Rutherford). All of this is the result of research, once scoffed at, but now a reality, and that bodes good or evil for mankind when the final results are made public, according to man's spiritual or material desires.

Dental surgery has a roll of honor in research that is second to none in a similar field. The time has arrived when the dreamers, the optimists of the profession, who are given to research, shall be aided in their work by our existing dental organizations, so that the next big advance for the weal of mankind may be discovered, the possession of the tooth bud free for implantation, its control to produce the type of tooth desired, and all other aspects attendant thereto.

This is an ideal worthy of the combined forces of the profession. Other ideals have been reached in various fields; this one for dental surgery may be attained also.

We have eyes to see, we have ears to hear, we have minds to develop the association of ideas. The other fields of science are contributing their share. Let us contribute this great boon to mankind.

Physicians Not Liable For Cures, Court Rules

TRENTON, N. J.—Unless actual negligence is shown, physicians are not liable for cures, except when specifically promised, is the ruling of the Supreme Court. In upholding the action of the Hudson Circuit Court, the higher court recently dismissed a complaint brought by Albert Gramaldi, of Jersey City, against Dr. Peter J. Zeglio, visiting physician at the Muhlenberg Hospital, Jersey City.

Gramaldi was treated as a patient at the Plainfield Hospital for a broken wrist. The wound became infected, and he lost the use of the member. Suit for damages was then instituted. The court held in that should Gramaldi be allowed to press his suit every physician would be subject to lawsuits if the cures were not effective. The court said that infection could come from a variety of causes, and that all the physicians can do is to aid nature in disposing of poisons.

Some New Research

Dr. J. S. Foote, Creighton University, Omaha, and Dr. Weston A. Price. Dr. Foote has devoted 16 years to a study of the comparative histology of bone and teeth. His findings are of great fundamental importance in biological study.

DR. J. S. FOOTE, pathologist and histologist of Creighton Dental College and for many years head of these departments in Creighton Medical College, has been given a grant by the National Dental Research Commission to carry on a study of the Histo-Pathology of the hard tissues of the mouth with special reference to bone.

The Board of Trustees reviewed the writings and works of Doctor Foote during their meeting in Chicago in June and recommended him for further consideration if his investigations could be confined to dental were placed at his disposal for this work. These studies are re- and oral tissues. A proposition was worked out and accepted during the Milwaukee meeting.

Doctor Foote is recognized as one of the world's foremost authorities on comparative histology of bone. For over 15 years he has been working almost continuously grinding, drawing, studying and classifying specimens of femur bones. He has made over 1100 complete or full circumference specimens from every kind of animal, that could be found with a femur bone. The specimens of the Smithsonian Institution and New York Museum of Natural History

corded in Vol. 35, No. 3 of the Smithsonian Contributions to Knowledge. He has also published a textbook on histology and an original method of study, called the Constructive Method. The student may build up each body tube layer by layer with pieces of cardboard representing each type of tissue, to aid him in memorizing the structure.

His work on the circulatory system in bone has just been published as Vol. 72, No. 10, of Smithsonian Miscellaneous Collections.

Several articles on the teeth and bone of fishes have been printed in the *Journal of the A. D. A.*, also a very interesting one on the cause of cleft palates appeared in the same journal in 1923.

Guy's Hospital 200 Years Old

The great and important institution known as Guy's Hospital is this year celebrating the two hundredth anniversary of its foundation. Apart from the great work done for sick and suffering poor and for the advancement of medical science, Guy's has an additional claim to fame as the first of the medical schools of London to include among its departments a large and fully equipped dental school. Three other London hospitals have subsequently followed this excellent example, and the dental profession must always owe a debt of gratitude to Guy's as being the first to take this great step forward in dental education.

The financial position of Guy's has always been rather better—or perhaps we should say not quite so bad—as the majority of London hospitals, and only on one previous occasion have the hospital authorities found it necessary to make a public appeal for funds. Now, on the occasion of their bicentenary, they are making their second appeal in 200 years. The amount asked for is £200,000. It looks a large sum at first sight, but the debt that London and the whole country owe to Guy's is so obvious and so enormous that we feel confident the sum appealed for will be willingly subscribed.—*The Dental Surgeon,* London.

Paul Revere's Horse

By JULIUS L. BISCHOF, D.D.S.
St. Louis, Mo.

IN BOSTON there once lived a D. D. S.
Who helped us out of a terrible mess,
He is known in history, far and near
As the dentist jockey and Paul Revere.

At twelve one night he rode through the streets
Calling the Yanks from under their sheets,
But now comes the question we must decide—
What color of horse did our champion ride?

It's funny, this fact they let us bemoan
Whether Sparky was white or black or roan,
And the pages of history have nothing to say
That the nag was a bob-tailed, shaggy bay.

Paul was a dentist, so the horse wasn't fat—
We know 'cause he made it in three hours flat,
But he beat the British, who came in fast boats
This demon of speed, always hungry for oats.

But we're strong for Paul, though full of despair
At not knowing the color of his pinto's hair,
And the history writers should sink in remorse
For not telling the shade of the Doctor's horse.

Bacteriology

By STANLE

President of The New York Stomatological Socie
Midtown Hospit

EVERY dental student is amazed when he is told that the study of bacteriology is included in the dental course. Little does he know its great importance to the profession of dentistry. Without a scientific background, such as bacteriology gives, the dentist knows very little about the pathogenic bacteria of the human body and their importance. When stomatology gets its rightful recognition, we will then realize that there is more than mechanics to dentistry. There is a practical value of the knowledge of bacteriology to the dentist.

First of all it gives a scientific foundation. One has only to look around and he will see man running wild because of lack of knowledge. With the knowledge of bacteriology comes the knowledge of whether a bacteriological report is correct. As a matter of fact, specialization comes after fundamentals, and bacteriology is fundamental and really not specialization.

Again, one who knows something about bacteria will have great respect for their multiplicity. This is a factor that many of our leaders are ignoring because they do not know.

Some of our very able talkers, who have the confidence of the profession will go before our leading societies and there tell about basing evidence on bacteriology and the laboratory reports, when, as a matter of fact, the report does not yield all the information that the dentist desires. For an example we will take a granulomata; the tooth is extracted, the operator trying to get the apex out without touching the tissues so as to avoid contamination. A smear is made, no bacteria. The suspected bacteria are plated out and we find large numbers of bacteria. The evidence on the smears are not always the beginner but the ender. Also these same men who pose as scientists do not tell you that the mouth operation is the only one not aseptic. The flap operation for removing a tooth is the best for culturing. Yet we are working in a bacteriological field—still a chance for error.

Last October while South attending a dental meeting, one of the dentists of the South, of nation-wide reputation, made the statement that "infection from a tooth cannot get into the blood stream but is taken care of by the lymphatics." This is not so scientifically. He also said that "If one streptococcus viridens got into the blood stream it meant instant death." Again he

and the Dentist

LOCUM, D.D.S.

ssociate, Pyorrhea Clinic, Stomatology Department
ew York City

Without a scientific background, such as bacteriology gives, the dentist knows very little about the pathogenic bacteria of the human body and their importance.

was wrong. Bacteria, pathogenic ones too, do get into the blood stream. Personally I like this man, but had I known then what I do now, I would have disputed his statements.

Facts are proof and when they are brought into the argument, personality and oratory have pretty rough sailing.

It so happens that I was one of the students taking stomatological bacteriology at the University and Bellevue Hospital Medical College of New York City under the competent instruction of Dr. Krumwiede, Dr. Park, Dr. Williams, Dr. Zingher, Dr. Thompson and their assistants. This very comprehensive course was arranged through Dr. Alfred Asgis and the American Stomatological Association. Dr. Charles Krumwiede so kindly offered many of the suggestions presented in this paper.

Experiment III which follows shows the result of mechanical flushing away of bacteria. The difference in bacteria before and after cleansing with dental cream, and before and after cleansing with water is amazing. Here is an experiment that you can try out in your own office and plate yourself or send to a laboratory.

EXPERIMENT III

PART I—(First Person)

1. Rinse mouth with 25 cc sterile water. Collect this in a sterile container. Plate 1 cc in agar.
2. Brush teeth for five minutes, using any dental cream (changing water in mouth 15 to 16 times). Rinse mouth (five to six times) thoroughly after brushing and discard.
3. Rinse mouth with 25 cc sterile water. Collect in sterile container. Plate 1 cc in agar.

Incubate agar plates at 37 degrees C.

The object of the experiment is to demonstrate the reduction of the bacteria in the mouth through the use of a dental cream, compared with the re-

duction of bacteria through cleansing with water.

PART II—(Second Person)

1. Rinse mouth with 25 cc sterile water. Collect this in a sterile container. Plate 1 cc in agar.
2. Brush teeth for five minutes, using water only. (Rinse and brush, changing water in mouth 15 to 16 times.) Rinse thoroughly (five to six times) and discard.
3. Rinse mouth with 25cc sterile water. Collect this in a sterile container. Plate 1 cc in agar.

Incubate plates at 37 degrees.

RESULTS OF EXPERIMENT

	Approx. No. in 1 cc. of .25 cc used.
PART I	
1. Number of bacteria in the mouth before cleansing	= 70,000
2. Number of bacteria in the mouth after cleansing with a dental cream	= 50,000
PART II (Control)	
1. Number of bacteria in the mouth before cleansing	= 220,000
2. Number of bacteria in the mouth after cleansing with water	= 40,000

Therefore one may say that tooth paste inhibits the removal of bacteria, while mechanical flushing with water decreases the amount of bacteria in the mouth. Here is a practical problem in bacteriology. 'Tis very evident that most of us are going wrong because we do not know the truth.

Take again the different types of mouths from the normal to the infected mouth.

First. We have the normal mouth. Low content of bacteria, with an occasional spirochete.

Second. Not quite so clean. Showing an increase of bacteria, with a fair amount of spirochetes and fusiform bacilli.

Third. Very unclean mouth. An increase of bacteria over the second type.

Fourth. Infected mouth. Pus sacs—gingiva broken down. Large quantities of bacteria. Smears make you dizzy.

The above classification emphasizes the importance of low numbers of bacteria. We at once see that the gradations are very dangerous.

Thus it is very evident that bacteriology is very important to the practicing dentist.

Burlington School Clinic

Dr. Garrison takes this means of replying to the numerous inquiries prompted by his article in February ORAL HYGIENE

Dear Doctor McGee:

I WROTE an article for the February issue of ORAL HYGIENE, entitled "The School Clinic." I have received so many inquiries in regard to the work that it has been absolutely impossible to answer them all as I would like.

I am sending you a report of our four years' work here, with the results. I find that a great many are interested in the clinic work, but are at a loss to know what to do in the schools.

Now I am enclosing a very brief resumè of the way we carry on the work in the schools, also our work in the clinic.

The solvent I mention is iodine and taxi, but, mind you, I only apply it to the very badly stained and filthy teeth, then sparingly.

Our work is free in the clinic to pupils; the board also supplies tooth brushes to all who have none.

I make all my drawings, placards, demonstrations, etc. There is very little on the market that I care to use. Each man has his own ideas and can easily make up his own talks to suit the particular place. In all our work in the schools we, an assistant and myself, run through about 400 each day either cleaning, classification, or examination.

Sincerely,

G. G. GARRISON, D. D. S.

Burlington, Iowa.

SUMMARY OF WORK CARRIED OUT IN THE BURLINGTON, IOWA, PUBLIC SCHOOLS

Clean all teeth in the schools in October and November: Have all pupils bring their tooth brushes to schools. Take them to the basement, or the sink, in classes. Examine their tooth brushes for size and psychological effect on pupils. Demonstrate method of brushing teeth. Your own method. Examine all mouths (rapidly) just for cleanliness and emergency cases. Have assistant apply tooth paste to all brushes. Apply solvent to all black, filthy, stained and unclean teeth, and have those pupils report to you again after brushing at the sink. Have all pupils brush teeth at the sinks. To those who require it give another application of solvent and tooth paste and have them brush again. We supply tooth brushes to those who do not have them. We do not clean dirty, filthy teeth in the clinic, but give the pupil a brush and sample tooth paste and show him how to do it; then we finish the job after he has done his part; he feels better by doing so. Give five-minute talk in classroom after pupils have cleaned their teeth. Have them prepare for classi-

fication in two months. Encourage each class to compete for the best record. Give advice and instruction where needed.

Classify all pupils in the schools in December and January: Examine all mouths rapidly. Divide in four classes, namely, O. K., white, yellow, black, having no cavities, one to three cavities, four to eight cavities, very bad. Have teacher write pupil's name under proper heading and keep record in school. Have the O. K. list as the Honor Roll. Encourage each pupil to get on the honor roll by having all decayed teeth filled. Give advice and instruction where advisable. Give five-minute talks in the classroom. Give pupil about two months to get on Honor Roll before final examination. Encourage all who possibly can to go to their own dentists. Have teacher keep the classification list and change them to the O. K. or Honor Roll when they have all decayed teeth filled and mouths are clean. Have them prepare for final examination in about two months. Encourage contests for the best grade in the school.

Final examination in March and April: Examine all teeth thoroughly; make record of same; go to each room and show pupils their records, also records of other rooms. Give them one more chance. Hold the books open two weeks for slow ones. Have each room strive for 100 per cent. Urge them to go to their own dentists. Have friendly contests between grades for best record, also between schools. Give advice and instruction where necessary. These last two weeks is where we make a wonderful showing.

Mothers' meetings in each school when convenient for the principal: Have each principal send notices to all mothers, urging them to come. Have plenty of drawings, charts, models—and a good, snappy talk (not too long). Show them how and why the teeth decay. Teach them the importance of the temporary teeth; also the six-year molar. Allow them to ask questions. Linger a half-hour for consultation and advice.

Talks to parent-teacher meetings, clubs, churches, etc.

REPORT OF FOUR YEARS' WORK DONE IN THE BURLINGTON, IOWA, PUBLIC SCHOOLS

About 3,200 pupils were examined each year.

	School year ending June,			
	1922	1923	1924	1925
Permanent teeth decayed	5,000	3,145	719	322
Temporary teeth decayed	9,000	7,391	5,385	5,283
Total teeth decayed	14,111	10,544	6,104	3,605
Pupils having decayed teeth	2,800	2,283	1,511	1,203
Pupils having permanent teeth decayed	.....	1,129	279	122
Pupils having temporary teeth decayed	.....	1,657	1,224	882
Pupils' teeth need cleaning	1,200	859	400	72
Teeth need extracting	.....	1,821	1,767	1,432
Pupils needing orthodontia	.....	301	229	389
Diseased gums	150	50	15	17
Abscesses	.....	786	21	66
Pupils on the O. K. list	200	580	1,720	1,986
Need frenum operation	.....	.....	116	30
Per cent of pupils with decayed teeth	85	72	44	36
Per cent lowest in any one school	.....	64	24	27
Per cent highest in any one school	.....	84	57	41
Per cent gain over last year	.....	13	28	8

REPORT OF WORK DONE IN THE DENTAL CLINIC

	1922	1923	1924	1925
Prophylaxis	1,181	960	514	349
Copper cement fillings	1,877	2,413	4,171	3,158
White cement fillings	547	317	304	247
Alloy fillings	824	194	83	140
Porcelain fillings	14	37	10	2
Gutta-percha fillings	11	63	131	231
Total fillings	3,277	3,024	4,699	3,778
Teeth extracted	1,215	911	1,252	1,224
Nerves capped	61	61	76	213
Pyorrhea cases treated	48	20	29	19
Nerves removed	31	26	13	9
Teeth treated and not filled	429	922	1,619	520
Talks given in the schools	217	154	254	251
Appointments in the clinic	1,915	1,787	2,646	2,444
Cleanings in the schools	2,120	3,327	3,318	3,208
Pupils sent to the clinic	1,282	1,269	1,818	2,148
Cards sent to parents	.....	3,264	3,249	1,500
Pupils with all work completed, in clinic	.....	.....	963	1,082
Silver nitrate cauterizations	.....	.....	.....	1,677
Samples tooth paste given out	750	1,630	2,200	1,500
Tooth brushes given out	.....	152	84	180

Improving the Shining Hour

Editor ORAL HYGIENE:

Very interested in your editorial concerning letter written you by Dr. Millberry (July). Your advice to him is very good, but I think an addition or two may benefit him and others.

The best way to spend your time in the office while waiting for a practice is reading and studying. I don't mean studying only dental magazines, but literature in general.

I would suggest studying Shakespeare, James' (Psychology), etc. Read Irvin S. Cobb, O. Henry, Balzac, Dumas, etc. But the best thing a young dentist can and should do is to get a general idea of what is happening in this world of ours; to do and see things through the eyes of others. *The Geographic* and *Current History* are excellent magazines to read.

Then there are the excellent correspondence school courses. I have been studying law for the last three years (La Salle), and the $200 for the course is well worth the wonderful educational returns received. I study an hour a day or more, and I consider the time as well spent as if I were working on a patient. Hoping that this will be of use to other young men waiting for a practice,

I am,

Very truly yours,

BENJ. DANIELS, D. M. D.

Boston, Mass.

International Oral Hygiene

Translated and Briefed by C. W. BARTON

Canada

The city of Hamilton, Ontario, has three dental clinics, to which are attached four part-time dentists and two whole-time dental assistants; a physician specializing in anesthetics gives his services weekly. At the present time five public schools and thirteen separate schools are under the jurisdiction of the Health Center Dental Clinic, with a total attendance of nearly 6,000 pupils. In the year 1924 the appointments at this clinic were 5,298 (2,070 extractions). The annual inspection showed 64 per cent needing treatment, as compared with 70 per cent last year.

The dental clinics at the King George and Cannon Street schools carried out 8,482 treatments, 5,098 extractions; the annual dental inspection extended to 15,920.

The daily press reported, under date of April 17, 1925, that Dr. M. J. Moore and Dr. L. A. Kilburn were appointed to take charge of the new dental clinic (the fourth) at an annual salary of $1,200 each. —*Oral Health*, April, 1925.

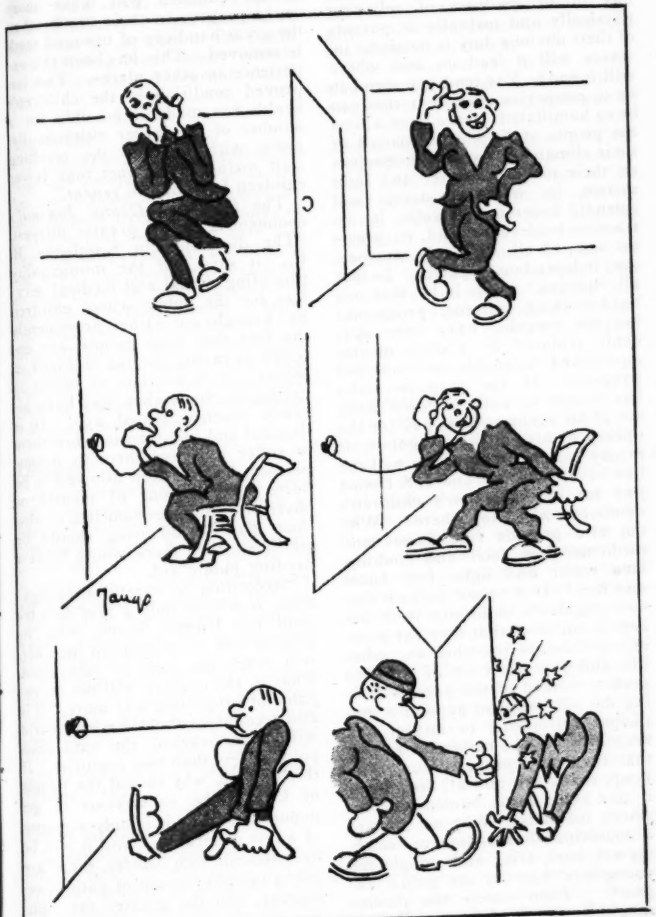
Regina, Saskatchewan, was one of the first cities of Canada to establish a free dental clinic, and has been doing excellent work in the schools in this city for about twelve years. The local dental society first took the matter up with the public school board in 1912, and the suggestion was made that at first local practitioners would give one-half day per week to this work and see the clinic established on solid ground.

This suggestion was acted upon by the school board and the clinic was opened. When once it was seen of what great service this clinic was capable in handling needy cases among the school population, the board gave Dr. W. H. Harvey the appointment as full-time school dentist in charge of the clinic. He left the clinic in 1917, and Dr. Grace Armstrong is now in charge of it, and is doing invaluable work from the health point of view among both the children and parents. At the present time there are some 6,000 cards on file at the surgery, and this does not include those who have left school. The school nurses, of whom there are three on the staff at the present time, make all first examinations and appointments. They decide when a child is a clinic case, and collect information as to whether the child's parents are able to attend financially to the case. The parents are advised that the child is in need of dental treatment and may be treated free at the school clinic if it is so desired. Once a child comes to the clinic for his first appointment he is then entered on the list of patients and given further appointments through his teacher. In 1924 the clinic's activity was as follows: Appointments made by nurses, 1,952; appointments kept at clinic, 1,551; fillings in permanent teeth, 923; extractions, 868; prophylactic treatments, 333; fillings in temporary teeth, 530; root fillings and treatments, 141; orthodontia cases, 6.—*Oral Health*, May, 1925.

The *Dominion Dental Journal* of April, 1925, reports that the dentists of Kamloops have decided not to take part in any clinic for the

Histoire sans paroles

A story without words



A cartoon by Jango, from the French dental publication, *La Semaine Dentaire*

school children owing to so much discussion. This discussion found voice in a letter by Dr. Wade to the Kamloops *Standard*, from which this may be quoted: "If this present-day idiotic madness of relieving physically and mentally fit parents of their obvious duty is persisted in, where will it lead us, and where will it end? The tendency seems to be to pauperize everybody that can be so humiliated. Once upon a time the people of Kamloops boasted of their climate and prided themselves on their town, its water and light system, its well-kept streets and splendid concrete sidewalks, its attractive boulevards, and, its greatest asset of all, its sturdy, prosperous, independent populace. Is that all changed? Can it be that our hard-working citizens, prosperous but not wealthy, have been suddenly replaced by a crew of impoverished, incapable and underfed paupers? If the taxpayer—who has bought or built his own home out of his savings—is to pay for the upkeep of his shiftless neighbor, or it may be, thriftless, where will the line be drawn? If you and I must pay for our neighbor's children's dentistry, why stop there? Why not also provide free doctor and medicine, free food and clothing, free water and light, free house and fuel? If we must see to it that our neighbor's children's teeth are kept in order so that they eat properly and escape pyorrhea and other ills, and pay for it out of our own pockets instead of the parents footing the bill, why not appoint a municipal chiropodist to inspect and keep in order the children's feet so that they may properly run, skip, jump, skate, ski, and all the rest of it, and avoid corns, bunions and ingrown toe-nails? Why not appoint a municipal barber to cut, comb, marcel, curl, frizz and shingle the youngsters' hair at the public expense? Then surely the throats should be provided for, tonsils and adenoids—fearsome sources of infections galore — removed, free, gratis, for nothing (except to the over-burdened taxpayer), to say nothing of goitre!"

To which the *Standard* editorially replies: "From a monetary point of view such an institution will ultimately prove an economy, as the children will make more rapid progres in their work when the great handicap of unsound teeth is removed. This has been the experience in other places. The improved condition in the children's health has made it possible for a number of the larger cities to dispense with some of the teaching staff owing to the fact that fewer children have had to repeat."

The *Dominion Dental Journal's* comment is of still greater interest. "The discussion in Kamloops, B. C.," it says, "of the municipality providing dental and medical services for the public school children has brought out rather prominently the fact that some people are opposed to caring for the children of others. It is too late to object to caring for them when they have already reached school age. It is illogical and inhuman to allow them to suffer or leave them to incompetency, having been allowed to be born. All persons of mental or physical disabilities sufficient to produce class D offspring should be sterilized, then there would be few needing public aid.

"According to careful investigations, it will be only a few decades until the United States, with its present rate of population increase, will reach the point of saturation. That is, the country will not be capable of supporting any more. It is also recognized that the whole world will have reached the saturation point in less than two centuries. If this be true, why should the people of Canada be so anxious to get population when it is only a matter of a few generations until it will be overstocked, and, besides, there are only a certain amount of natural resources, and the greater the number among whom these are to be divided, the less there will be for those to come. If we wish to leave a great heritage to our progeny let us not divide it among too many, and especially those of poor physi-

cal and mental caliber who will have to be kept."

The Southampton, Ontario, Social Service Club has succeeded in establishing a dental clinic for the children of the Southampton Public School. In a recent survey by school medical officers it was discovered that about 90 per cent of the pupils were suffering from defective teeth. —*Dominion Dental Journal*, April, 1925.

Argentine

Dr. Osvaldo Tiscornia reports the case—the second in his practice—of the death from toxemia caused by an abscessed second lower molar of a 15-year-old boy. The case history extended back over a period of one year; the tooth was extracted on February 29, a phlegmous and pronounced trismus being present. Following the extraction pus in large quantities was drained from the socket, the patient was kept under treatment in the hospital, but died on March 11 from septicemia. —*Revista Odontologica.*

Uruguay

The National Committee on Physical Culture has created within its Medical Office a Department of Dentistry, of which Dr. F. M. Pucci is the director, assisted by Dr. M. A. Marsiglia. Fifteen hundred dental examinations were carried out last year in the colleges of Montevideo; their result will be published at an early date.

A dental clinic has likewise been opened by the Institute for the Prevention of Syphilis in its Central Dispensary, Dr. Juan A. Rodriguez, with Dr. Imael Feo, Jr., as director. — *Progresos Odontológicos*, January, 1925.

Great Britain

A systematic dental service was created in the British Army in 1906, civilian dentists then carrying out the necessary treatments. In 1915 a certain number of dentists received temporary army commissions. Seventy per cent of the recruits required dental treatment, and in 1918 a military inspector of dental service was nominated; in 1921 the service was put on a permanent basis through the organization of the Army Dental Corps. Besides actual conservative treatment, the army dental officers are held to educate the men in oral hygiene and the proper and regular use of the tooth brush.

The report on the health conditions of the British Army in 1922 contains some interesting data on the work of the Army Dental Corps. Just as in 1921, it becomes evident from the report that diseased mouths and teeth have been almost the chief causes for invaliding men out of the service. Of 77,000 recruits examined, 3,874 were invalided out on account of dental disease, as against 3,024 the year before. This figure was surpassed only by that referring to men invalided out because of bad eyesight. — *British Dental Journal.*

Switzerland

Dr. W. Hoffmann reports in the Yearbook of the Society for Natural Sciences of St. Gallen on the result of his dental examination of 463 soldiers from the southern part of the canton. The average of decayed teeth and missing teeth per capita was 14.44. A comparative study of the results of these examiations in various districts demonstrates the fact that caries increase as the consumption of the home-baked corn and wheat bread decreases. The comparison of the incidence of dental disease in members of different professions showed, per capita: for farmers, 13.20; building industry, 13.94; metal industry, 13.84; coachmen, laborers, etc., 14.50; civil service, teachers, students, 14.50; food trade, 16.04; factory workers outside of the metal industry, 16.47; commercial employes, 17.02. The farther away from Mother Nature man lives the more liable is he to dental disease and physical inferiority. The most pronounced influence, however, is that exerted by bread; those who consume white bread only, showed

an average of 11.87, those eating corn and wheat bread only, 9.44 defective teeth.—*Dental Journal*, No. 4, 1925.

Italy

Under the auspices of the Italian Institute for Hygiene, its able director, Prof. Dr. Ettore Levi, has published a little booklet in two-color print under the title of "L'Alfabeto della Salute" (Health A B C), for the education of children in the precepts of hygiene. In the form of easily memorizable rhymes, each one accompanied by a design by F Scarpelli, food, air, cleanliness, teeth, exercise, and all the rest are brought closer to the imagination of the children. The booklet is published by A. Mandadori in Milan, its price being 2.75 lire.

Poland

Last February a dental clinic was opened at the Home of the Jewish Society for Deaf Mutes in Warsaw, which is to look after dental service for the children of the internat, as well as those attending the school for deaf-mute children.

The Polish War Ministry has issued regulations concerning the extent of dental service to be given to drafted soldiers in the military dental clinics. Since the teeth of all these recruits cannot be put into an ideal condition during the short period of their service in the army, and in view of the great expense, the dental treatment of such soldiers must be limited strictly to first aid, i. e., extractions and fillings.

In the prescriptions for the extraction of teeth no tendency is to be seen to saving teeth which surely ought to be saved. On the whole, it seems, judging by these regulations, that the Polish War Ministry is both acting under a misconception of the value of a natural tooth and losing one of the best chances for educating the citizens of the republic to an appreciation of the importance of a healthy mouth.

Russia

P. G. Dauge, organizer of the Dental Department of the People's Commissariat for Health in Moscow, reported to the First Pan-Russian Odontological Congress, the first after an 11 years' interval, on the situation of dentistry under the government of the Soviets.

The first stage of the Dental Department's work was characterized by a radical abolition of the private form of dental service as practiced under the bourgeois régime. Nationalization of all private dental offices brought dentistry within reach of the large working classes. (?)

According to the plan conceived by the department, each one dentist was to look after the dental service of 10,000 city people, 38,000 rural inhabitants, and 3,000 school children. During the first period, 1918-21, one-third of the maximum service provided by this plan had been put into operation. On October 1, 1921, there were on the territory of the entire Soviet Republic approximately 1,225 city ambulatoria with 1,283 dentists, and 659 rural clinics with 751 dentists. There were besides 101 prosthetic ambulatoria with 248 dental mechanics.

Since this scheme, however, like all bolshevik ideas, was far from satisfactory, the Soviets permitted in 1921 again the private practice of dentistry, under certain restrictions; but only for about one year. The private practitioners having become very busy indeed, the government were afraid they might turn bourgeois again (!); therefore, everything was again nationalized, with the result that there are even fewer dental ambulatoria now than before, and no private dental offices.

The department seems to have endeavored to organize a school dental service on the plan of Prof. Kantorowicz, but both the government and the physicians were opposed to it. By and by, school dental clinics were opened, abandoned again during the period of private concessions, etc., in the eternal muddle of bolshevism.

Judging by the review of Danze's report in the *Zalmtechnische Reform* (Nr. 14, 1925), there is nothing good in dental bolshevism, but rather all that is bad.

Australia

In commenting on Dr. C. N. Johnson's exposé of the present dental situation in America, an editorial of *The Dental Science Journal of Australia* says that "efforts have been made from time to time by the various dental organizations in Australia to spread the gospel of oral hygiene, but so far not a great deal has been accomplished. The public press has not been found too willing to publish contributions from dentists, which may be readily explained, perhaps, on the ground that matters relating to dentistry are not regarded as of first importance to the public, and newspaper managers have to look to it that they publish material which will be eagerly sought after by their readers. The picture shows have been availed of, to some extent, for educating the people in this direction, and films have been produced showing the actual process of caring for the teeth, and much good has evolved from these measures. The latest system is by means of wireless, and there can be no doubt that this has been found the most efficient method up to date. The Society of Dental Science was recently asked to assist in this matter, and has done excellent work in having appointed a competent committee to take charge of the matter, with the result that suitable addresses have from time to time been broadcast. The value of these addresses has been indicated by the numerous letters and applications which have been received from individuals and representatives of firms, factories, etc., for further information."

Dentist Forsees England Weakened By Poor Teeth

LONDON.—[*Associated Press*]—During the last few generations the teeth of the nation have been getting steadily worse, according to J. H. Babcock, who, in his presidential address to the forty-fifth annual meeting of the British Dental Association, contended that the strength of the country is being sapped by dental disease. Bad teeth, he said, was one of the results of civilization, and, roughly speaking, the nearer people got back to nature the better the teeth.

Mr. Babcock said that during the last fifty or sixty years there had been a great change in the nation's food, and that the increase in population and the concentration in cities had involved the importation of more food, largely canned or preserved. The softness of modern food, Mr. Babcock believed, failed to provide that friction and cleansing to which gums should be naturally subject in the mastication of hard foods.

Taking the nation as a whole, said Mr. Babcock, it appeared that at least 85 per cent of the population under 20 years of age, and an increasing percentage over that age, were sufferers from dental diseases. There was a higher incidence among women than men. "Dental disease was to be found among all civilized people," averred the speaker, "but we in these islands undoubtedly exhibit a bad pre-eminence. It is sapping the strength of the nation."

Editorials

REA PROCTOR McGEE, D.D.S., M.D., *Editor*
212 Jenkins Building, Pittsburgh, Pennsylvania

The Pacific Idea

STRANGE as it may seem to the lords of dental education, the dental schools of the Pacific Coast actually have some consideration for the opinions of the members of the dental societies of their districts.

Even in the South there is a growing feeling that possibly there is something more important in dental education than the political ambitions of certain alleged educators.

In California, Oregon and Washington there are four dental schools; in many other far western states there are no dental schools. These four schools in addition to the dental department of the University of Denver will very largely supply new graduates to the vast country from the Rocky Mountains to the Pacific Ocean and from the Canadian border to Mexico.

In October a council will be convened in San Francisco composed of the representatives of the far western schools, the dental societies of the mountain and Pacific states and the boards of dental examiners of those states.

This meeting will discuss and decide upon the educational requirements for dentistry west of the Rocky Mountains.

Those states east of the Rockies that recognize the Pacific requirements as a satisfactory basis for examination and admission to practise will be similarly recognized in the West.

Those states who attempt to force the rest of the United States to kowtow to unreasonable requirements and who refuse to examine candidates from the Pacific slope will find their candidates barred from examination in the Pacific and neighboring states.

This is a logical result of the political effort to force the six-year course upon the dental profession. By all means encourage dental students to take as much education as possible but don't blackjack them into it.

The present heads of the dental schools finished in three years, some of them in less. They are pretty good—at least as good as the average recent graduate.

Already leaders in medicine are discussing the question as to whether or not the required medical course is too long, with the preponderance of opinion that any change must be to shorten rather than lengthen the course.

The plan of the Pacific schools to discuss their problem with the representatives of the dental societies is laudable and should be followed first by the South where senti-

ment is rapidly crystallizing. Later it is possible that the dental societies of the effete East may take a hand.

The California Problem

IF you lived in a state that offered superior climatic advantages and if in that state from two to three times as many dentists as could possibly make a living applied to the state board for licenses each year, what would you do about it?

The ideal that most of us hold is that of a general reciprocity. There is no such thing, however, at present. Under present conditions every dentist who moves from one state to another must pass an examination.

Would you favor an unlimited influx of new practitioners even if they were good? No, you wouldn't. Neither would I under present restrictions.

California's problem is to admit a reasonable number of well qualified men from other states and at the same time accommodate her own graduates.

I hold no brief for the California Dental Board. I have no dental license there but I must admit my previous idea of exclusion was wrong.

California now has more dentists per capita than any other state. We can't all practise in California so somebody who wishes to move must go somewhere else.

They are now swamping Florida. Florida can't take care of all of them. Why wouldn't it be a good idea sometime to find out where our services are needed and apply there? There is more chance for success.

Wouldn't it be a good plan for the American Dental Association to keep a list of places that need dentists and of the places that already have too many and then advise those who contemplate a change where to go?

The Gavel

A VERY clever idea has been evolved by the Northern Ohio Dental Association.

The President's gavel, which is made with a prism-shaped steel head, has engraved upon the flat spaces the names of all of the Presidents who have served the society since its organization.

This is a very pleasant way to renew at each meeting the memory of those who have devoted their time and energy to the welfare of their fellow members.

A Mirror With a Message

DR. C. EDMUND KELLS, of New Orleans, sends this interesting mirror which we have photographed so that ORAL HYGIENE's readers may see it too.

Dr. Kells states that it is of the vintage

of 1850 and says, "While the dentist was absent from the chair for a moment or two, the patient could contemplate the legends upon the back of the mirror."

The back of the mirror is a silver plate, engraved with the following, illegible in the picture:

Operations on the teeth unless performed properly are dear at any price.

Making Full Set of Teeth

Teeth on gold plate, each	$10.00 to $15.00
Largest size gold plugs, extending down each root; gold plugs, extra finish each	5.00
Tin foil plugs	2.00
Cleansing and polishing set of teeth	5.00 to 10.00
Front teeth separated with a file	1.00
Jaw teeth separated with a file	2.00
Gold plate placed over nerve	2.00
Nerves destroyed, each	2.00
Teeth evened, each tooth	1.00
Carious spots removed, each	1.00
Teeth extracted, each tooth or root	1.00
Natural or mineral teeth, set on piv	10.00
Diseased gums treated	

Payment is expected as soon as the operation is completed.

"When this old timer," says Dr. Kells, "thus told his patients that 'Operations on the teeth unless performed properly are dear at any price,' to use the parlance of the day, he 'said a mouthful.' Might it not be well for the average dentist of 1925 to live up to that sentiment?"

A Perfect Day in D

By THOMAS C. BONNEY, D.

DR. FIXUM awoke with a start. This fact in itself would ordinarily evoke no comment, but it was so unusual in the doctor's experience as to cause him to marvel. The early morning air was cool and refreshing and the sunlight filtering in through the curtains and vines over the window bathed the room in splashes of light and shade which, strange to say, Dr. Fixum had not observed for many years.

Although it lacked several hours of his usual time for rising, the doctor found it impossible to longer remain abed so he arose, bathed, shaved and dressed, and then began to wonder what he could do to occupy himself until it was time to go to the office. Seating himself beside the library table he picked up a book between the leaves of which he discovered several sheets of paper. These proved to be the manuscript of an article he had started to prepare several months ago, but which he had never finished.

As he read the manuscript through he wondered why he had ever thought he was too tired or that he did not have the time after his day's work was done to devote to its completion. Surely a few hours' work was all that was needed to add the finishing touches, and it occurred to him that he could easily finish the article before his wife arose to get breakfast.

And he could drop it in the mail box on his way to the office. Going into his long disused study he removed the accumulated junk of months from the top of his desk, swung the typewriter into place and, seating himself, began to write. Funny how the ideas just seemed to spring into being and how easily and smoothly the old typewriter seemed to work.

Must be something after all to this early rising stuff. A good thing to keep up.

The hours slipped by unnoticed as he wrote, and the following paragraphs with which the article ended will show to what extent the doctor was engrossed in the subject upon which he was writing:

"The influence for good that early rising exerts, and the stimulation to be derived from several hours' work before breakfast are factors contributing to continued well-being that are too often overlooked by the average dentist in his daily struggle for the almighty dollar.

"The early morning quiet, the drone of insects among the flowers outside the window, the gentle breeze through the room and the subdued atmosphere of the study at a time when the rest of the household are still

in Dental Practice

ONNEY, D.D.S., Aberdeen, South Dakota

asleep, bring a contentment and peace of mind the tonic value of which cannot be overestimated."

He had just finished the last line when his wife appeared in the doorway. "For mercy's sake, Bill," she exclaimed, "what in the world has happend to you?" "Oh, nothing," the doctor replied. "I woke up and couldn't go to sleep again so thought I'd just get up and finish this article I started several months ago. Lord, but I'm hungry! When do we eat?"

"I'll have breakfast ready in a jiffy," said Mrs. Fixum. "I suppose your usual slice of toast, thin and crisp, and a cup of coffe is what you want isn't it?"

"Lady," Dr. Fixum replied, *"I'm Hungry!* The first time, too, since I don't know when. I want some fruit, two fried eggs, some bacon, plenty of toast and about a gallon of coffee."

Mrs. Fixum prepared breakfast as ordered albeit with some misgivings, but the doctor soon convinced her that his appetite was by no means imaginary. He ate with a relish and appeared to enjoy the meal to the utmost.

He departed for the office full of enthusiam for the day's work ahead, and with a feeling of vigor and optimism that he had not felt in years.

He arrived at his office about an hour ahead of his usual time, and having no appointments until nine-thirty he decided to look over his mail. The first letter he opened contained a check for $200.00. Accompanying the check was a letter which read as follows:

Dear Doctor—Enclosed herewith you will find our check in the amount of $200.00 for the first annual dividend on your five shares of stock (par value $100.00 per share). We beg to advise that the well has proved to be a "gusher" and that no more stock will be offered for sale.

The present market value of your stock is $500.00 per share, and the company stands ready and willing to purchase it at this figure should you care to dispose of it.

We congratulate you upon the keen business acumen which prompted you to become a stockholder in our company, and we look forward to many years of profitable and cordial business relations with you.

Sincerely yours,
The Flim-Flam Oil Co.,
per W. E. Gettem, Pres.

The next letter he opened was from a lady for whom he had made complete upper and lower dentures, and it read as follows:

Dear Doctor Fixum—I am enclosing herewith money-order for $250.00 for the plates you made for me last month. I have had no occasion to call and see you since the plates were put in, as they are absolutely perfect. Every one in the family thinks the plates look exactly like my own teeth, and all of my friends think they are wonderful.

I am unable to understand how it is possible for you to do such perfect work for the very small fee

you charge. I should like an appointment for some time next week, as I want to have impressions made for another set of teeth, as you so thoughtfully suggested at the time of my recent visit to your office.

Cordially yours,
(Mrs.) Ima Lyre.

At this point the doctor's first patient for the day came in and she proved to be a woman who wanted some extracting done. At her request the doctor made radiograms of *all* of her teeth and discovered two which needed attention. One was a badly impacted lower third molar and the other was an upper first molar at the apices of the roots of which was an enormous infective cyst. Their removal was advised and the patient informed that only one of them should be removed at a time, and that it would be best to use a local anesthetic. The following remarks will show the very unusual type of patient this lady proved to be. "Very well, doctor. I am glad to do whatever you think best, and so far as the anesthetic is concerned it makes no difference with me.

"I am not a bit nervous, my heart is good and strong, and while the teeth I have had extracted in the past were not very difficult to remove, I can readily appreciate that these teeth are radically different from the usual run of extractions.

"You say it will cost about $100.00 to extract both of them? Why, I think that is very reasonable. If agreeable to you I will come up tomorrow and have one of them taken out."

By this time Dr. Fixum was prepared for almost anything and was therefore not unduly surprised when the next patient came in and addressed him in the following words: "I just dropped in, doctor, to let you know how well pleased I am over the results you got in this broken jaw of mine.

"The teeth on the left side do not strike by about a quarter of an inch, and the three teeth in front that you thought could be left had to be taken out on account of a nasty infection that developed because the splint got loose, but I am glad it is no worse and just wanted you to know how pleased I am over the skilful way you took care of me.

"What is the balance of my bill? $300.00? Why, there must be some mistake! I only paid you $150.00 and there must surely be a larger balance than that! Well, of course if you put it that way. Here is my check in full. Be assured I will not soon forget the splendid service you have given me."

This encounter slightly dazed the doctor and he decided that a little lunch was in order. It was difficult for him to grasp the remarkable change in events and he felt that a couple of hours of relaxation might enable him to adjust himself to his suddenly changed practice.

He returned from lunch to find a woman and her little daughter waiting for him. An examination of the little girl's mouth showed about a dozen temporary teeth to be extracted and the child's mother was so informed. The mother was per-

fectly willing to have nitrous oxid-oxygen administered to the child. She made no mention of the child's frail condition of health, nor did she even ask if gas was dangerous!

She expressed no desire to remain in the operating room while the extraction was being done, nor did the child want her to remain.

The little patient took the anesthetic without protest of any kind, there were no unpleasant complications to mar the progress of the work, and the child awoke without any nausea, did not claw or paw around in her mouth with dirty fingers, and did not cry. She made no complaint about pain and expressed a wish that she could have more teeth removed. The fee of $20 was paid with profuse thanks "for everything," and the doctor stepped out to greet the next patient.

"Good afternoon, doctor. My name is Jones. H. E. Jones. Dr. Blank sent me over to have an x-ray examination of my teeth. I am suffering from rheumatism, and am far below my usual weight.

"I do not eat well and am tired all the time.

"Yes, Dr. Blank did that. He found my blood pressure much below normal, and he said that my white count showed a definite leucopenia.

"An examination of my urine revealed a high specific gravity, some albumen and a few casts. My temperature is normal."

The radiograms were made and revealed many areas of alveolar rarefaction and Mr. Jones was advised that the complete extraction of all the remaining teeth was the only thing to do.

Mr. Jones was evidently a peculiar man. He did not exclaim, "But Doctor, *they never hurt me!!*" Neither did he require Dr. Fixum to explain the films in detail more than six times. He did not express any surprise when Dr. Fixum said he did not think it advisable to remove all the teeth at one time, nor did he have a regular spasm when told that the abscess cavities would have to be thoroughly cleaned out.

He did not seem to think that Dr. Fixum should guarantee a cure, nor did he think the fee of $50 exhorbitant. He made an appointment for the following day, paid for the radiograms *and did not ask if he could have the films,* and said good night as Dr. Fixum prepared to leave for the day. * * * Dr. Fixum partially aroused as the alarm clock sounded its sibilant warning, but before he was thoroughly awake he realized that the foregoing was but a wonderful dream. He dropped back upon his pillow with a smile of utter content upon his face. * * * The coroner's report was, "Death was due to unknown causes; probably due to cardiac dilatation induced by delusions of grandeur."

In the Editor's Mail

Dr. Jordon vs. Dr. Kells

My dear Dr. McGee:

HAVING practiced preventive dentistry for many years I do not agree with Dr. Kells' definition of a dentist in the July ORAL HYGIENE. Or rather, I define the duties of a dentist in a different way. I assume that they include a large amount of work in preventive dentistry that is done without instruments. *"Not filling teeth, but preventing the necessity for filling teeth should be the dentist's work." The education of the laity is a most valuable part of the dentist's daily task.

If Dr. Kells will examine the mouths of the *children* of twenty physicians and surgeons he may realize that the task of teaching preventive dentistry would fare better in other hands.

Prospective mothers are reading magazines, going to clinics and no doubt many of them have children of school age who are getting the necessary teaching in oral hygiene. But last and most important of all, the mother goes occasionally to a dentist so let us leave the task in the hands of the family dentist. Dr. McGee, do persuade Dr. Kells to urge every dentist to do his duty and *teach* oral prophylaxis as well as practice it; then we shall have true *preventive dentistry* which will play quite an important part in the field of preventive medicine.

Yours very sincerely,
M. EVANGELINE JORDON.

*Page 30 — "Operative Dentistry for Children," by M. Evangeline Jordon.

Proposed World Tour for Dr. C. N. Johnson

Editor ORAL HYGIENE:

The subject matter of your contributor, Dr. Pepys' article in your last issue,† relating more particularly to our honored and respected friend Dr. C. N. Johnson, was discussed at a meeting of my Executive Coun-

†April ORAL HYGIENE, page 643.

cil held on the 19th instant when a resolution was carried which is set out in the enclosed copy of a letter sent by even mail to Dr. Don Gallie.

Those of us who were fortunate enough to meet Dr. Johnson on his visit to this Dominion more than twelve years ago, still bear in mind his kindliness and encouragement to us, and his eager willingness to impart some of his wonderful store of knowledge more especially to younger men.

It would be a privilege and pleasure to members of my Association to again have him among us, and to none more than the writer.

With compliments and fraternal greetings.

Yours sincerely,
FOR NEW ZEALAND DENTAL ASSOCIATION, INC.,
MAURICE E. DENNISTON,
Hon. Secretary and Hon. Business Manager, *New Zealand Dental Journal.*

Dr. Don Gallie,
Marshall Field Annex,
Chicago, Ill., U. S. A.

Dear Doctor:

Proposed World Tour for Dr. C. N. Johnson.

This project, set out in ORAL HYGIENE pages 643 and 644, was discussed at a meeting of the Executive Council of my Association held on 19th instant, when the following resolution was carried unanimously:

"*Minute* Dr. C. N. Johnson: Secretary reported on proposal by A. D. A. to send Dr. C. N. Johnson of Chicago, Immediate Past President of A. D. A. for a world's tour in recognition of his great services to the profession:

Resolved: That Secretary be instructed to advise the promotors that if the plan materialized and Dr. Johnson's visit to New Zealand could be arranged to coincide with the next Annual Meeting of the Association, the Association would be pleased to defray any rail, motor or boat charges on his behalf while he was traveling in New Zealand."

You will note that this is a *conditional* contribution to your fund: unfortunately we are, at the time of writing, unable to give you definite information as to the date of our next Annual Meeting—the place, so far as our friend is concerned is of no importance, but just as soon as the date is settled we will advise you.

Should it not be possible for Dr. Johnson's visit to coincide with our meeting, he will still be received in this Dominion with open arms, and you can call on the writer for any assistance as to itinerary; in this latter case, of course, we could not pledge our Association to contribute.

My Association is persuaded that Dr. Johnson would need no urging to return to this Dominion where he is held in affectionate remembrance.

The writer will be pleased to hear from you at your convenience, and will co-operate in any way possible.

With compliments and kind regards.

Yours fraternally,
FOR NEW ZEALAND DENTAL ASSOCIATION, INC.,
MAURICE E. DENNISTON,
Hon. Secretary and Hon. Business Manager, *New Zealand Dental Journal.*

"Preventive

By J. LEONARD McGIL

I HAVE just read an article in ORAL HYGIENE for July, in which Dr. C. Edmund Kells, of New Orleans, attacks the movement called "Preventive Dentistry" as a fad, and as being misnamed.

Dr. Kells asks, "How can there be any such thing as preventive dentistry?" and goes on to say "The two words are absolutely incompatible and when used together mean nothing." In both of these things I believe Dr. Kells is mistaken.

Using Dr. Kells' own authority, Webster's International, we find that a fad is a weak hobby, or popular whim. Now preventive dentistry is certainly the absolute opposite to that.

It is as great a step forward in dentistry as the change from the old method of extracting the diseased teeth to the present-day method of filling and saving those teeth. It certainly is not a popular whim that makes people have decayed teeth restored. Why then should it be a popular whim to *prevent* the diseases that make restoration necessary?

One has but to look at the statistics to see the strength and value of the movement for preventive dentistry, as far as it has gone, to be convinced of its soundness and permanency.

Next I shall give my reasons for believing the term "preventive dentistry" to be correct. To my notion, dentistry as it stands today is divided into two main branches, namely: preventive and restorative.

What restorative dentistry is we all know. All of the present-day dentists are equipped for restorative work, but very few are equipped to do *preventive* work, —that is preventive as applied to the prevention of the *necessity* for restorative work, or to the prevention of the necessity for dental surgery.

To use Dr. Kells' own example — of course there is no such thing as preventive surgery, except as such surgery is done to prevent more serious trouble; but preventive medicine *certainly* could be applied in relation to the prevention of the *necessity* for surgery.

Dr. Kells spoke of preventive dentistry when he used the term *educate* for in this word lies the key to the whole problem of prevention, and can be summed up: "Prevention is education." That means education of everyone concerned with the problem —the physician, the dentist, the child, and, above all, the mother.

In defining preventive dentistry, Dr. Kells overlooks a fundamental difference in the

Dentistry"

D.S., Minneapolis, Minn.

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words *prevention*, and *preventive*, as applied to dentistry. He defines prevention—it means to prevent—and asks if it is possible to prevent dentistry. Now, *prevention* is a noun. *Preventive* is an *adjective* modifying the word *dentistry*. It modifies dentistry enough to make the words compatible, and makes *preventive dentistry* a part of the profession just as much as *restorative* dentistry is.

On the other hand, Dr. Kells gives the layman's definition of dentistry, "The art, science and profession of a dentist." Had he gone more deeply into the subject he would find that prevention used in connection with dentistry is not new.

Stedman's Medical Dictionary defines dentistry as the "Science of the *prevention* and treatment of diseases of the teeth." Here then, is the justification of my division of dentistry into the two branches — preventive and restorative. In the past, dentistry has been, for the most part, restorative, but now we are recognizing the value of prevention and with the co-ordinated effort of all concerned, it is possible to eliminate the necessity for restoration. Who knows but that in generations to come prevention and not restoration will be the biggest part of dentistry?

Laffodontia

If you have a story that appeals to you as funny, send it in to the editor. He *may* print it—but he won't send it back.

"Wot th' deuce you lookin' at?"

"I'm trying to see what dress Myrtle has on."

"Humph! That's a small matter."

◈ ◈ ◈

Dentists don't beat their wives, they just crown them.

◈ ◈ ◈

ST. PETER (to applicant): "Where are you from?"

APPLICANT: "California."

ST. PETER: "Come on in, but I don't think you'll like it."

◈ ◈ ◈

CUSTOMER: "I want some underwear."

CLERK: "How long?"

CUSTOMER: "Dern you! I want to keep it."

◈ ◈ ◈

"Ethel is terribly dumb. She thinks Mussolini is a town in Austria."

"You don't say, and where is it?"

◈ ◈ ◈

TOM: "My wife kisses me every time I come into the house."

DICK: "Affection?"

TOM: "No, investigation."

◈ ◈ ◈

They laid him out in the precinct house on the floor, and the cop who brought him in stood by while the doctor bent over and examined the patient. The doctor then arose and said: "He has been drugged." The cop, shivering and pallid, said: "I admit it; I drug him three blocks."

CHARLES (to rather stout flapper at dance): "May I have the next dance?"

FLAPPER: "I'm too danced out."

CHARLES: "No, no, you're just pleasingly plump."

◈ ◈ ◈

The wife and daughter of Lieutenant Berry were halted by a sentry on duty who had orders to allow no one to enter by that gate.

"Sorry, but you will have to go around to the main gate."

"Oh, but we're the Berry's."

"Lady, I don't care if you're the cat's meow—you can't go through this gate."

◈ ◈ ◈

SALESMAN: "I've called about an attachment I have for your typewriter."

MANAGER: "Oh, that's all right, but please don't bother her during working hours."

◈ ◈ ◈

SHE: "Don't you love driving?"

HE: "Yes; but we're in town yet."

◈ ◈ ◈

ED: "Mary ran off and left me."

BESSIE: "Is that right?"

ED: "No, but it's so."

◈ ◈ ◈

"After the wreck, when your husband was drowning, did all his past sins come up before him?"

"Good heavens, no! He wasn't in the water all that time."